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EXAMINER

NINO, ADOLFO

ART UNIT	PAPER NUMBER
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2831

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/919,006

Applicant(s)

GUSTINE ET AL.

Examiner

Adolfo Nino

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 and 107-110 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 107-110 is/are allowed.
- 6) ☒ Claim(s) 1-29 and 31-35 is/are rejected.
- 7) ☒ Claim(s) 30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/12/04; 6/28/04</u> . | 6) <input type="checkbox"/> Other: _____ |

Drawings

The drawings are objected to because in Figure 15, reference number "706" referring to what the Examiner understood as one of the end walls of case 1500 (below cam 1510) should be ---705---. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9, 11-16, 18-26, 28, 29 and 31-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Farnworth et al. (US 5,995,378).

Regarding claim 1, Farnworth et al. disclose a receptacle (1 in fig. 1) for confining circuit cards to different locations within a housing (30 in fig. 1), the receptacle (1) comprising: a frame (32 in fig. 3) comprising an array of slots (34 in fig. 3), each slot (34) containing one of the circuit cards; and a cam (402 in fig. 14b) selectively engageable with (col. 10, lines 42-43) the frame (32) for clamping the circuit cards within the frame. **Note** that it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987). **Note** that it has been held that the recitation that an element is "capable of" performing a function (in this case "engageable" which have the suffix "-able" and according to the Merriam Webster's Collegiate Dictionary, 10th Edition, the suffix -able means "capable of"; hence, the Examiner interpreted "engageable" as: able of engaging; therefore, capable of engaging) a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re. Hutchison, 69 USPQ 138.

Regarding claim 2, Farnworth et al. disclose the receptacle (1) of claim 1, wherein the frame (32) is partitioned into first and second sub-frames (32; housing 30 partitioned by any of the partitions as marked by the Examiner in fig. 3) by a first

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partition (fig. 3) and each of the first and second sub-frames (32) partitioned into a an array of slots (34 in fig. 3) by a plurality of second partitions (fig. 3).

Regarding claim 3, Farnworth et al. disclose the receptacle (1) of claim 2, wherein the first sub-frame (32) is movable relative to the second sub-frame (32) and is in slidable contact with the receptacle. **Note** that it has been held that the recitation that an element is “capable of” performing a function (in this case “movable” which have the suffix “-able” and according to the Merriam Webster’s Collegiate Dictionary, 10th Edition, the suffix –able means “capable of”; hence, the Examiner interpreted “movable” as: able of moving) is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re. Hutchison, 69 USPQ 138.

Regarding claim 4, Farnworth et al. disclose the receptacle (1) of claim 3, wherein the first partition is in slidable contact with the receptacle. **Note** that it has been held that the recitation that an element is “capable of” performing a function (in this case “slidable” which have the suffix “-able” and according to the Merriam Webster’s Collegiate Dictionary, 10th Edition, the suffix –able means “capable of”; hence, the Examiner interpreted “slidable” as: able of sliding) is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re. Hutchison, 69 USPQ 138.

Regarding claim 5, Farnworth et al. disclose the receptacle (1) of claim 4, wherein the cam (402 in fig. 14c) is engageable with the first sub-frame (32) for sliding the first sub-frame so that circuit cards that are in tile first sub-frame contact the first partition and sliding the first partition into contact with the circuit cards of the second

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sub-frame to clamp the circuit cards contained in the slots of the first sub-frame between the first sub-frame and the first partition and the circuit cards contained in the slots of the second sub-frame between the first partition and the second sub-frame.

Note that it has been held that the recitation that an element is “capable of” performing a function (in this case “engageable” which have the suffix “-able” and according to the Merriam Webster’s Collegiate Dictionary, 10th Edition, the suffix –able means “capable of”; hence, the Examiner interpreted “engageable” as: able of engaging) a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re. Hutchison, 69 USPQ 138. **Also note** that it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

Regarding claim 6, Farnworth et al. disclose the receptacle (1) of claim 1, wherein the cam (402 in fig. 14b) is selected from the group consisting of a pair of cams in tandem, a pair of cams, and two tandem pairs of cams (fig. 14c).

Regarding claim 7, Farnworth et al. disclose the receptacle (1) of claim 1, wherein the cam (402) is disposed within the receptacle (fig. 14c).

Regarding claim 8, Farnworth et al. disclose the receptacle (1) of claim 1, wherein the cam (402) is rotatably attached to the receptacle (fig. 14c).

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Regarding claim 9, Farnworth et al. disclose the receptacle (1) of claim 1, wherein the cam (402) is disposed on a shaft (46 in fig. 3) that rotates the cam into and out of engagement with the frame (32).

Regarding claim 11, Farnworth et al. disclose the receptacle (1) of claim 1, wherein the frame (32) comprises a pair of frames (32 in fig. 3; where the frame is divided into two frames (32) by one of the partitions as marked by the Examiner in fig. 3), the cam (402 in fig. 14c) attached to one of the pair of frames (32) and selectively engageable with the other of the pair of frames for clamping the circuit cards within each of the pair of frames (fig. 14c).

Regarding claim 12, Farnworth et al. disclose a receptacle (1 in fig. 1) for confining circuit cards to different locations within a housing (30), the receptacle (1) comprising: at least one frame (32) partitioned into first and second sub-frames (32 in fig. 3, where the frame (32) is divided into two frames (32) by one of the partitions as marked by the Examiner in fig. 3) by a first partition (any of the partitions fig. 3), each of the first and second sub-frames (32) partitioned into an array of slots (34) by a plurality of second partitions (fig. 3), each slot (34) containing one of the circuit cards (fig. 14c); and at least one cam (402 in fig. 14c) selectively engageable with the first sub-frame to clamp the circuit cards within the at least one frame (fig. 14c). **Note** that it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). **Note** that it has been held that the recitation that an element is "capable

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of” performing a function (in this case “engageable” which have the suffix “-able” and according to the Merriam Webster’s Collegiate Dictionary, 10th Edition, the suffix –able means “capable of”; hence, the Examiner interpreted “engageable” as: able of engaging) a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re. Hutchison, 69 USPQ 138.

Regarding claim 13, Farnworth et al. disclose the receptacle (1) of claim 12, wherein the at least one cam (402) is selected from the group consisting of a pair of cams in tandem, a pair of cams, and two tandem pairs of cams (fig. 14c).

Regarding claim 14, Farnworth et al. disclose the receptacle (1) of claim 12, wherein the at least one cam (402) is disposed within the receptacle (fig. 14c).

Regarding claim 15, Farnworth et al. disclose the receptacle (1) of claim 12, wherein the at least one cam (402) is rotatably attached to the receptacle (fig. 14c).

Regarding claim 16, Farnworth et al. disclose the receptacle (1) of claim 12, wherein the at least one cam (402) is disposed on a shaft (46 in fig. 3) that rotates the at least one cam into and out of engagement with the first sub-frame (32).

Regarding claim 18, Farnworth et al. disclose the receptacle (1) of claim 12, wherein the first sub-frame (32) is movable relative to the second sub-frame and is in slidable contact with the receptacle. **Note** that it has been held that the recitation that an element is “capable of” performing a function (in this case “movable” which have the suffix “-able” and according to the Merriam Webster’s Collegiate Dictionary, 10th Edition, the suffix –able means “capable of”; hence, the Examiner interpreted “movable” as: able

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of moving) is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re. Hutchison, 69 USPQ 138.

Regarding claim 19, Farnworth et al. disclose the receptacle (1) of claim 18, wherein the first partition is in slidable contact with the receptacle. **Note** that it has been held that the recitation that an element is “capable of” performing a function (in this case “slidable” which have the suffix “-able” and according to the Merriam Webster’s Collegiate Dictionary, 10th Edition, the suffix –able means “capable of”; hence, the Examiner interpreted “slidable” as: able of sliding) is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re. Hutchison, 69 USPQ 138.

Regarding claim 20, Farnworth et al. disclose the receptacle (1) of claim 19, wherein the at least one cam is engageable with the first sub-frame for sliding the first sub-frame so that circuit cards that are in the first subframe contact the first partition and sliding the first partition into contact with the circuit cards of the second sub-frame to clamp the circuit cards contained in the slots of the first sub-frame between the first sub-frame and the first partition and the circuit cards contained in the slots of the second sub-frame between the first partition and the second sub-frame. **Note** that it has been held that the recitation that an element is “capable of” performing a function (in this case “engageable” which have the suffix “-able” and according to the Merriam Webster’s Collegiate Dictionary, 10th Edition, the suffix –able means “capable of”; hence, the Examiner interpreted “engageable” as: able of engaging; therefore, capable of engaging) a function is not a positive limitation but only requires the ability to so

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perform. It does not constitute a limitation in any patentable sense. In re. Hutchison, 69 USPQ 138. **Also note** that it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

Regarding claim 21, Farnworth et al. disclose a receptacle (1 in fig. 1) for confining circuit cards to different locations within a housing, the receptacle (1) comprising: at least one frame (32) partitioned into first and second sub-frames (32; housing 30 partitioned by any of the partitions as marked by the Examiner in fig. 3) by a first partition (fig. 3), each of the first and second sub-frames (32) partitioned into an array of slots (34) by a plurality of second partitions (fig. 3), each slot (34) containing one of the circuit cards; wherein the first sub-frame (32) is movable relative to the second sub-frame and is in slidable contact with the receptacle; wherein the first partition is in slidable contact with the receptacle; and at least one cam disposed within the receptacle and rotatably attached to the receptacle, the at least one cam selectively rotatable for selectively engaging the first subframe for sliding the first sub-frame so that circuit cards of the first sub-frame contact the first partition and sliding the first partition into contact with the circuit cards of the second sub-frame to clamp the circuit cards contained in the slots of the first sub-frame between the first sub-frame and the first partition and the circuit cards contained in the slots of the second sub-frame between the first partition and the second sub-frame. **Note** that it has been held that the recitation that an element is "capable of" performing a function (in this case

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“engageable/slidable/movable/rotatable” which have the suffix “-able” and according to the Merriam Webster’s Collegiate Dictionary, 10th Edition, the suffix –able means “capable of”; hence, the Examiner interpreted “engageable/slidable/movable/rotatable” as: able of engaging/sliding/moving/rotating) is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re. Hutchison, 69 USPQ 138. **Also note** that it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

Regarding claim 22, Farnworth et al. disclose the receptacle (1) of claim 21, wherein the at least one cam (402 in fig. 14c) is selected from the group consisting of a pair of cams in tandem, a pair of cams, and two tandem pairs of cams (fig. 14c).

Regarding claim 23, Farnworth et al. disclose the receptacle (1) of claim 21, wherein the at least one cam (402 in fig. 14c) is disposed on a shaft (46 in fig. 3) that rotates the at least one cam into and out of engagement with the first sub-frame (fig. 14c).

Regarding claim 24, Farnworth et al. disclose a receptacle (1 in fig. 1) for confining circuit cards to different locations within a housing (30), the receptacle (30) comprising: first and second frames (32 in fig. 3; where the frame is divided into two frames by one of the partitions as marked by the Examiner in fig. 3), each of the first and second frames (32) partitioned into first and second sub-frames (32) by a first partition (fig. 3), each of the first and second sub-frames (32) partitioned into an array of

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slots (34 in fig. 3) by a plurality of second partitions (fig. 3), each slot (34) containing one of the circuit cards (fig. 14c); and at least one cam (402 in fig. 14c) disposed between the first and second frames (32), the at least one cam (402) rotatably attached (fig. 14c) to the first frame and adapted to engage the second frame to exert a force on each of the first and second frames for clamping the circuit cards within the first and second frames. **Note** that it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987). **Also, note** that it has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re. Hutchison, 69 USPQ 138.

Regarding claim 25, Farnworth et al. disclose the receptacle (1) of claim 24, wherein the at least one cam (402) is selected from the group consisting of a pair of cams in tandem, a pair of cams, and two tandem pairs of cams (fig. 14c).

Regarding claim 26, Farnworth et al. disclose the receptacle (1) of claim 24, wherein the at least one cam (402) is disposed on a shaft (46 in fig. 3) that is rotatably attached to the first frame, the shaft (46) rotating the at least one cam into and out of engagement with the second frame (fig. 14c).

Regarding claim 28, Farnworth et al. disclose the receptacle (1) of claim 24, wherein the first sub-frame (32) of each of the first and second frames (32) is movable relative to the second sub-frame of each of the first and second frames and is in slidable

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contact with the receptacle. **Note** that it has been held that the recitation that an element is "capable of" performing a function (in this case "movable/slidable" which have the suffix "-able" and according to the Merriam Webster's Collegiate Dictionary, 10th Edition, the suffix -able means "capable of"; hence, the Examiner interpreted "movable/slidable" as: able of moving/sliding) a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re. Hutchison, 69 USPQ 138.

Regarding claim 29, Farnworth et al. disclose the receptacle (1) of claim 28, wherein the first partition of each of the first and second frames (32) is in slidable contact with the receptacle. **Note** that it has been held that the recitation that an element is "capable of" performing a function (in this case "slidable" which have the suffix "-able" and according to the Merriam Webster's Collegiate Dictionary, 10th Edition, the suffix -able means "capable of"; hence, the Examiner interpreted "slidable" as: able of sliding) a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re. Hutchison, 69 USPQ 138.

Regarding claim 31, as best understood by the Examiner, Farnworth et al. disclose the receptacle (1) of claim 24, wherein the receptacle (1) is thermally coupled (147 in figs. 8, 9) to the housing (30).

Regarding claim 32, Farnworth et al. disclose a receptacle (1 in fig. 1) for confining circuit cards to different locations within a housing (30 in fig. 1), the receptacle (1) comprising: first and second frames (32 in fig. 3; housing 30 partitioned by any of the

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partitions as marked by the Examiner in fig. 3), each of the first and second frames (32) partitioned into first and second sub-frames (32 further divided by partitions as marked by the Examiner in fig. 3) by a first partition (fig. 3), each of the first and second sub-frames (32 in fig. 3) partitioned into an array of slots (34 in fig. 3) by a plurality of second partitions (as marked by the Examiner in fig. 3), each slot (34) containing one of the circuit cards; wherein the first sub-frame (32) of each of the first and second frames (32) is movable relative to the second sub-frame of each of the first and second frames and is in slidable contact with the receptacle; wherein the first partition of each of the first and second frames is in slidable contact with the receptacle; and at least one cam disposed between the first and second frames, the at least one cam rotatably attached to the first sub-frame of the first frame and is selectively rotatable for to engaging the first sub-frame of the second frame to exert a force on the first subframe of each of the first and second frames to slide the first sub-frame of each of the first and second frames so that circuit cards of the first sub-frame of each of the first and second frames contact the first partition of each of the first and second frames and to slide the first partition of each of the first and second frames into contact with the circuit cards of the second sub-frame of each of the first and second frames to clamp the circuit cards contained in the slots of the first sub-frame of each of the first and second frames between the first sub-frame and the first partition of each of the first and second frames and the circuit cards contained in the slots of the second sub-frame of each of the first and second frames between the first partition and the second sub-frame of each of the first and second frames. **Note** that it has been held that the recitation that an element is

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“capable of” performing a function (in this case “engageable/slidable/movable/rotatable” which have the suffix “-able” and according to the Merriam Webster’s Collegiate Dictionary, 10th Edition, the suffix –able means “capable of”; hence, the Examiner interpreted “engageable/slidable/movable/rotatable” as: able of engaging/sliding/moving/rotating) is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re. Hutchison, 69 USPQ 138. **Also note** that it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

Regarding claim 33, Farnworth et al. disclose the receptacle (1) of claim 32, wherein the at least one cam (402) is selected from the group consisting of a pair of cams in tandem, a pair of cams, and two tandem pairs of cams (fig. 14c).

Regarding claim 34, Farnworth et al. disclose the receptacle (1) of claim 32, wherein the at least one cam (402) is disposed on a shaft (fig. 14c) that is rotatably attached to the first sub-frame (32) of the first frame (32), the shaft rotating the at least one cam into and out of engagement with the first sub-frame of the second frame (fig. 14c).

Regarding claim 35, as best understood by the Examiner, Farnworth et al. disclose the receptacle (1) of claim 32, wherein the receptacle (1) is thermally coupled (147 in figs. 8, 9) to the housing (30).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 10, 17 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farnworth et al. (US 5,995,378) in view of Jungersen (US 4,987,978).

Regarding claims 10, 17 and 27, Farnworth et al. disclose the receptacle (1) as claims 1, 12 and 24, respectively, wherein the cam (402 in figs. 14a-c) comprises a curved surface (figs. 14a-c; col. 10, lines 49-51), **except for** the curved surface comprising serrations. Jungersen teaches that it is known to have serrations on the surface of a cam as set forth at column 2, line 55. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have serrations on

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the curved surface of the cam, as taught by Jungersen in order to provide a better grip between the curved surface of the cam and its contacting surface.

Allowable Subject Matter

Claims 107-110 are allowed.

The following is an examiner's statement of reasons for allowance:

The cited prior art does not disclose, teach, or suggest, alone or in combination, a receptacle for confining circuit boards comprising: at least one frame thermally coupled to the housing, each frame having at least one adjustable slot; at least one cam, wherein when the at least one cam applies a force on the frame, the size of the at least one adjustable slot is reduced to clamp a circuit card therein and thermally couple the circuit card to the frame.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claim 30 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

With respect to claim 30, the cited prior art does not disclose nor teach, alone or in combination, the limitation therein of "wherein the force exerted on the first and

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second frames slides the first sub-frame of each of the first and second frames so that circuit cards of the first sub-frame of each of the first and second frames contact the first partition of each of the first and second frames and slides the first partition of each of the first and second frames into contact with the circuit cards of the second sub-frame of each of the first and second frames to clamp the circuit cards contained in the slots of the first sub-frame of each of the first and second frames between the first sub-frame and the first partition of each of the first and second frames and the circuit cards contained in the slots of the second sub-frame of each of the first and second frames between the first partition and the second sub-frame of each of the first and second frames" in combination with the other claim limitations.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Smithson et al. (US 6,496,385 B1) disclose an assembly for installing or removing printed circuit cards. White et al. (US 6,421,252 B1) disclose a system and method for a self-aligning multiple card enclosure. Heitkamp (US 6,406,312 B1) discloses a circuit card captivation and ejection mechanism. Johnson et al. (US 6,292,361 B1) disclose an apparatus for mounting and cooling a system component assembly. Bachman et al. (US 5,923,531) disclose an enhanced circuit board arrangement. Hastings et al. (US 5,822,196) disclose how to secure a card in an electronic device. Goodman et al. (US 5,398,164) disclose a printed circuit card

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latching and stiffening assembly. Cipolla et al. (US 5,337,218) disclose a circuit card interconnecting structure. Hallum et al. (US 4,909,752) disclose a circuit card retainer.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Response to Arguments

Applicants' arguments filed 1/12/04 have been fully considered but they are not persuasive. The Examiner respectfully traverses the Applicants' arguments in regards to independent claims 1, 12, 21 and 32 that the terms engageable/movable are a proper limitation in the context of independent claim 1, 12, 21 and 32. The words "engageable/movable" have the suffix –able and according to the Merriam Webster's Collegiate Dictionary, 10th Edition, the suffix –able means "capable of"; hence, the Examiner interpreted "engageable/movable" as: able of engaging/moving; therefore,

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capable of engaging/moving. And it has been held that the recitation that an element is "capable of" performing a function (in this case "engageable/movable" having the suffix -able meaning "capable of") is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. The Examiner does not understand what the Applicants wrote on page 12, second paragraph, where it reads: "Moreover, since Claims 22-31 depend from....independent Claim 21," because Claim 24 is an independent claim.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adolfo Nino whose telephone number is (571) 272-1981. The examiner can normally be reached on M-F (7:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean A Reichard can be reached on (571) 272-2800 ext. 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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